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<b>7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)</b>					<b>8. PERFORMING ORGANIZATION REPORT NUMBER</b>	
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# Ear Acupuncture for Post-operative Pain Associated With Ambulatory Arthroscopic Knee Surgery: A Randomized Controlled Trial

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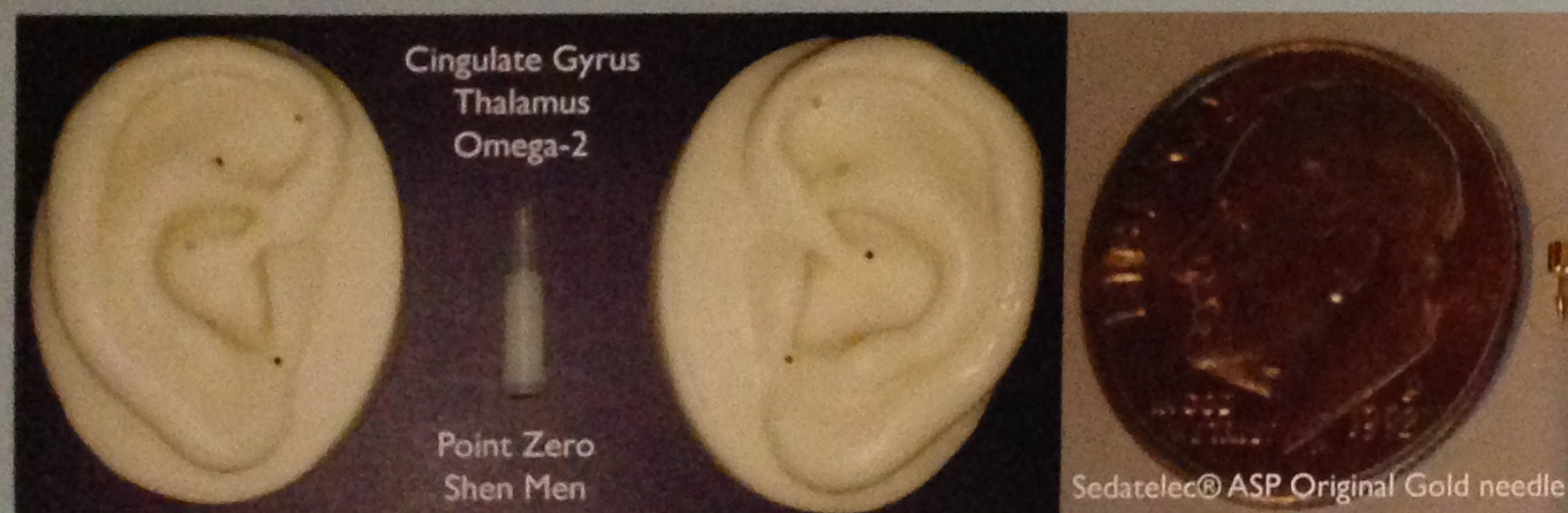


## INTRODUCTION

- Post-op pain impacts recovery
- Auricular Acupuncture is a low risk option for acute pain control
- Battlefield acupuncture (BFA) is a specific auricular acupuncture technique
- BFA is easily learned by non-acupuncturists
- **Does adding BFA to standard treatment improve post operative outcomes in patients undergoing knee arthroscopy?**

## METHODS

- Single Blind randomized controlled trial
- Men and women >18yrs old undergoing unilateral knee arthroscopy without ligamentous repair
- **Group 1:** Standard Treatment
- **Group 2:** Standard Treatment + BFA (needles placed under anesthesia)
- **Outcome measures:** Post-op pain scores, inpatient/outpatient medication usage, time to ambulation without assistance, post anesthesia care unit (PACU) discharge time, Pain Impact Questionnaire (PIQ6) scores
- Statistical analysis: Independent t-test



## RESULTS

Pain Scores	Standard	Standard +BFA	p-value
5min	1.87	2.18	0.78
30 min	1.80	1.88	0.92
24hrs	3.40	4.35	0.27
1 month	1.33	2.13	0.21
Fentanyl (µg)	10.00	6.25	0.64
Time to PACU Discharge (min)	58.80	72.71	0.08
Narcotic Doses	23.40	15.75	0.45
Non-narcotic Doses	10.47	12.13	0.82
Days to Ambulation without Assistance	13.80	14.53	0.40
Return to Work (days)	20.64	14.53	0.07

- N=32
- No demonstrated difference in pain scores, pain medication usage, time to ambulation without assistance or PACU discharge time
- PIQ6 scores will be calculated when all data is collected

## DISCUSSION

- **Strengths:** RCT, patient blind to treatment group, bandages covered all points in all patients, staff involved in pain scores and medication administration were blinded to treatment
- **Weaknesses:** Small sample size, no sham acupuncture performed, standard post-op pain medication orders frequently not followed, needles placed before onset of pain.
- **Potential reasons for non-significance:**
  1. Auricular Acupuncture not effective
  2. Adjunctive pain treatment not needed due to efficacy of standard pain meds